

## ***Curriculum Vitae***

### **David Griffiths Kimmel**

Lead Research Oceanographer  
EcoFOCI group, RACE division  
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### **I. Personal**

Birth date: 12 August, 1974  
Birth place: State College, Pennsylvania  
Citizenship: United States of America

### **II. Education**

2001 Ph.D., Marine-Estuarine-Environmental Science, University of Maryland,  
Baltimore County, Maryland

1996 B.S., Biology (Ecology Option), Pennsylvania State University, University Park,  
Pennsylvania

### **III. Professional Experience**

2016-Present: Research Oceanographer, EcoFOCI group, RACE division, NMFS, NOAA  
2013-2016: Associate Professor (with tenure), Department of Biology/Institute for  
Coastal Science and Policy, East Carolina University  
2008-2013: Assistant Professor, Department of Biology/Institute for Coastal Science  
and Policy, East Carolina University  
2006- 2008: Research Assistant Professor, University of Maryland Center for  
Environmental Science, Horn Point Laboratory  
2005-2006: Associate Research Scientist, University of Maryland Center for  
Environmental Science, Horn Point Laboratory  
2001-2005: Assistant Research Scientist, University of Maryland Center for  
Environmental Science, Horn Point Laboratory  
1996-2001: Research/Teaching Assistant, Dept. Biol. Sci., University of Maryland,  
Baltimore County

### **IV. Research**

#### **A. Area of professional expertise**

Biological oceanography, zooplankton ecology, coastal ecology, climate impacts on ecosystems, and quantitative ecology

## B. Awards and Recognition

2014 Five Year Achievement for Excellence in Research and Creative Activity – East Carolina University

2013 Outstanding reviewer for journal *Estuaries and Coasts*

## C. Publications (39 total)

***h*-index 16 (Google Scholar)**

***h*-index 14 (Scopus); Scopus ID: 7004433565**

***h*-index 13 (Web of Science); Web of Science Researcher ID: A-9643-2012**

### 1. Papers in refereed journals

Pierson JJ, **Kimmel DG**, Roman MR. 2016. Temperature impacts on *Eurytemora carolleeae* size and vital rates in the upper Chesapeake Bay in winter. *Estuaries and Coasts*. DOI 10.1007/s12237-015-0063-z (in press)

Kaneshiro-Pineiro MY, **Kimmel DG**. 2015. Local wind dynamics influence the distribution and abundance of the sea nettle *Chrysaora quinquecirrha* at six estuarine recreation sites in North Carolina, USA. *Estuaries and Coasts*. 38(6): 1965-1975.

**Kimmel DG**, McGlaughon BD, Leonard J, Paerl HW, Taylor JC, Cira EK, Wetz MS. 2015. Mesozooplankton abundance in relation to the chlorophyll maximum in the Neuse River Estuary, North Carolina, USA: implications for trophic dynamics. *Estuarine, Coastal, and Shelf Science* 157:59-69.

Primo AL, **Kimmel DG**, Marques SC, Martinho F, Azeiteiro UM, Pardal MA. 2015. Zooplankton community responses to regional-scale weather variability: a synoptic climatology approach. *Climate Research*. 62:189-198

Dell'Apa A, Cudney JE, **Kimmel DG**, Rulifson RA. 2014. Sexual segregation of spiny dogfish (*Squalus acanthias*) in fishery-dependent surveys in Cape Cod, Massachusetts: potential management benefits. *Trans. Am. Fish. Soc.* 143(4): 833-844.

Zhang H, Ludsin SA, Mason DM, Brandt SB, Stow CA, Adamack AT, Zhang X, **Kimmel DG**, Roman MR, Boicourt WC. 2014. Hypoxia, habitat quality, and the spatial distribution of pelagic fishes in the northern Gulf of Mexico. *Mar. Ecol. Prog. Ser.* 505: 209-226.

Cathey AM, Miller NR, **Kimmel DG**. 2014. Spatiotemporal stability of trace and minor elemental signals within the early larval shell of the hard clam *Mercenaria mercenaria*. *J. Shellfish Res.* 33(1): 247-255.

**Kimmel DG**, Tarnowski M, Newell RIE. 2014. The relationship between interannual climate variability and juvenile Eastern Oyster (*Crassostrea virginica*) abundance at a regional scale in Chesapeake Bay, USA. *N. Amer. J. Fish. Management*. 34: 1-15.

- Dell'Apa A, Johnson JC, **Kimmel DG**, Rulifson RA. 2013. The international trade and fishery management of spiny dogfish: a social network approach. *Ocean & Coastal Management*. 80: 65-72.
- Grant MN, Meritt DW, **Kimmel DG**. 2013. Chemical induction of settlement behavior in larvae of the eastern oyster *Crassostrea virginica* (Gmelin). *Aquaculture*. 402-403: 84-91.
- Kimmel DG**, Tarnowski M, Newell RIE. 2012. Long-term (1939-2008) spatial patterns in juvenile oyster (*Crassostrea virginica*, Gmelin 1791) abundance in the Maryland portion of Chesapeake Bay. *J. Shellfish Res.* 31(4): 1023-1031.
- Cathey AM, Miller NR, **Kimmel DG**. 2012. Shell microchemistry of juvenile *Mercenaria mercenaria*: spatiotemporal patterns and implications for modeling larval dispersal. *Mar. Ecol. Prog. Ser.* 465:155-168.
- Roman MR, Pierson JJ, **Kimmel DG**, Boicourt WC, Zhang X. 2012. Spatial patterns in hypoxia and zooplankton in the northern Gulf of Mexico. *Estuaries and Coasts*. 35: 1261-1269.
- Dell'Apa A, **Kimmel DG**, Clo S. 2012. Trends of fish and elasmobranch landings in Italy within the frame of the law 41/82: overview of elasmobranchs management aspects. *ICES J. Mar. Sci.* 69(6): 1045-1052.
- Kimmel DG**, Boynton WR, Roman MR. 2012. Long-term decline in the calanoid copepod *Acartia tonsa* in central Chesapeake Bay, USA: an indirect effect of eutrophication? *Estuarine, Coastal and Shelf Sci.* 101: 76-85.
- Devreker D, Pierson J, Souissi S, **Kimmel DG**, Roman MR. 2012. An experimental approach to estimate egg production and development rate of the calanoid copepod *Eurytemora affinis* in Chesapeake Bay, USA. *J. Exp. Mar. Biol. Ecol.* 416-417: 72-83.
- Mitra S, **Kimmel DG**, Snyder J\*, Scalise K, McGlaughon BD, Roman MR, Jahn GL, Pierson JJ, Brandt SB, Montoya JP, Rosenbauer RJ, Lorenson TD, Wong FL, Campbell PL. 2012. Macondo-1 well oil-derived polycyclic aromatic hydrocarbons in mesozooplankton from the northern Gulf of Mexico. *Geophys. Res. Lett.* 39, L01605, doi:10.1029/2011GL049505.
- \*Undergraduate co-author
- Kimmel DG**, Boicourt WC, Pierson JJ, Roman MR, Zhang X. 2010. The vertical distribution and diel variability of mesozooplankton biomass, abundance and size in response to hypoxia in the northern Gulf of Mexico. *J. Plank. Res.* 32: 1185-1202
- Kimmel DG**, Boicourt WC, Pierson JJ, Roman MR, Zhang X. 2009. A comparison of the mesozooplankton response to hypoxia in Chesapeake Bay and the northern Gulf of Mexico. *J. Exp. Mar. Biol. Ecol.* 381: S65-S73
- Zhang H, Ludsin SA, Mason DM, Adamack ST, Brandt SB, Zhang X, **Kimmel DG**, Roman MR and Boicourt WC. 2009. Hypoxia-driven changes in the behavior and spatial distribution of pelagic fish and mesozooplankton in the northern Gulf of Mexico. *J. Exp. Mar. Biol. Ecol.* 381: S80-S91.
- Pierson JJ, Roman MR, **Kimmel DG**, Boicourt WC and Zhang X. 2009. Quantifying changes in vertical distribution of mesozooplankton in response to hypoxic bottom waters. *J. Exp. Mar. Biol. Ecol.* 381: S74-S79.

- Newell RIE, Tettletbach ST, Gobler CJ and **Kimmel DG**. 2009. Relationships between reproduction in suspension feeding hard clams *Mercenaria mercenaria* and phytoplankton community structure. Mar. Ecol. Prog. Ser. 387: 179-196.
- \***Kimmel DG**, Miller WD, Harding LW, Houde ED and Roman MR. 2009 Estuarine ecosystem response captured using a synoptic climatology. Estuaries and Coasts. 32(3): 403-409.  
\*Editor's choice for open access
- Kimmel DG** and Hameed S. 2008. An update on the relationship between the North Atlantic Oscillation and *Calanus finmarchicus*. Mar. Ecol. Prog. Ser. 366: 111-117.
- Kimmel DG** and Newell RIE. 2007. The influence of climate variation on eastern oyster (*Crassostrea virginica*) juvenile abundance in Chesapeake Bay. Limnol. Oceanogr. 52(3): 959-965.
- Kimmel DG**, Miller WD and Roman MR. 2006. Regional scale climate forcing of mesozooplankton dynamics in Chesapeake Bay. Estuaries and Coasts 29(3): 375-387.
- Zhang X, Roman M, McGilliard C, **Kimmel D** and Boicourt W. 2006. Temporal and spatial variability in zooplankton biomass and hydrographic variables along an axial transect in Chesapeake Bay. J. Geophysical Res. 111: C05S11, doi:10.1029/2005JC003085.
- Miller WD, **Kimmel DG** and Harding LW. 2006. Predicting Susquehanna River discharge using winter climate patterns. Water Resources Res. 42: W05414, doi:10.1029/2005WR004270.
- Kimmel DG**, Roman MR and Zhang X. 2006. Spatial and temporal variability in factors controlling mesozooplankton dynamics in Chesapeake Bay: Evidence from biomass size spectra. Limnol. Oceanogr. 51(1): 131-141.
- Kemp WM, Boynton WR, Adolf JE, Boesch DF, Boicourt WC, Brush G, Cornwell JC, Fisher TR, Glibert PM, Hagy JD, Harding LW, Houde ED, **Kimmel DG**, Miller WD, Newell RIE, Roman MR, Smith EM and Stevenson JC. 2005. Eutrophication of Chesapeake Bay: Historical trends and ecological interactions. Mar. Ecol. Prog. Ser. 303:1-29.
- Roman MR, Adolf JE, Bichy J, Boicourt WC, Harding LW, Houde ED, Jung S, **Kimmel DG**, Miller WD and Zhang X. 2005. Chesapeake Bay plankton and fish abundance enhanced by Hurricane Isabel. EOS. 86(28): 261, 265.
- Kimmel DG** and Roman MR. 2004. Long-term trends in mesozooplankton abundance in Chesapeake Bay USA: influence of freshwater input. Mar. Ecol. Prog. Ser. 267: 71-83.
- Kuperman RG, Checkai RT, Ruth LM, Henry T, Simini M, **Kimmel DG**, Phillips CT and Bradley BP. 2003. A proteome-based assessment of the earthworm *Eisenia fetida*: response to chemical warfare agents in sandy loam soil. Pedobiologia. 47(5-6): 617-621.
- Bradley BP, Shrader EA, Meiller JC and **Kimmel DG**. 2002. Protein expression signatures: a method of proteomics. Mar. Env. Res. 54: 373-377.
- Kimmel DG** and Bradley BP. 2001. Specific protein responses in the calanoid Copepod *Eurytemora affinis* exposed to salinity and temperature combinations. J. Exp. Mar. Biol. Ecol. 266(2): 135-149.

## 2. Books or chapters in books or other publications

- Kimmel DG.** 2011. Chapter 6.05 - Plankton Consumer Groups: Copepods. *In: Trophic relationships of coastal and estuarine systems* (Eds: Wilson JG, Luczkovich JJ). *In: Treatise on Estuarine and Coastal Science* (Eds: Wolanski E, McClusky D). 6: 95-126.
- Kimmel DG,** Townsend H, Carruthers TJB, Fertig B. 2010. Chapter 8: Environmental statistics: balancing simplicity and explanatory power. *In: Integrating and Applying Science: A Handbook for Effective Coastal Ecosystem Management.* Longstaff BL, Carruthers TJB, Dennison WC, Lookingbill TR, Hawkey JM, Thomas JE, Wick EC, Woerner J (Ed). IAN Press, Cambridge, Maryland. 113-132 pp.
- Boesch DF, Coles VJ, **Kimmel DG,** Miller WD. 2010. Chapter 23: Climate change: coastal dead zones. Comstock GL (Ed). *In: Life Science Ethics.* Springer, Dordrecht, The Netherlands. 423-434 pp.
- Boesch DF, Coles VJ, **Kimmel DG,** Miller WD. 2007. Ramifications of climate change for Chesapeake Bay hypoxia. *In: Regional Impacts of Climate Change in the United States : Four Case Studies.* The Pew Center on Global Climate Change. 57-70 Pp. [http://www.pewclimate.org/regional\\_impacts](http://www.pewclimate.org/regional_impacts).

### 3. Technical Reports

- Kimmel DG.** 2016. PCS Phosphate effluent dispersal in the Pamlico River estuary: 2015. Institute for Coastal Science and Policy, East Carolina University, Greenville NC.
- CZR Incorporated, **Kimmel DG.** 2015. Annual creeks report for 2014 monitoring year PCS Phosphate Company, Inc. Volumes I and II. CZR, Inc. Wilmington, NC.
- Kimmel DG.** 2015. PCS Phosphate effluent dispersal in the Pamlico River estuary: 2014. Institute for Coastal Science and Policy, East Carolina University, Greenville NC.
- CZR Incorporated, **Kimmel DG.** 2014. Annual creeks report for 2013 monitoring year PCS Phosphate Company, Inc. Volumes I and II. CZR, Inc. Wilmington, NC.
- Kimmel DG.** 2014. PCS Phosphate effluent dispersal in the Pamlico River estuary: 2013. Institute for Coastal Science and Policy, East Carolina University, Greenville NC.
- CZR Incorporated, **Kimmel DG.** 2013. Annual creeks report for 2012 monitoring year PCS Phosphate Company, Inc. Volumes I and II. CZR, Inc. Wilmington, NC.

### 4. Submitted Manuscripts

- Lichti DA, Rinchard J, **Kimmel DG.** 2016. Changes in zooplankton community structure and fatty acid profiles at the freshwater/saltwater interface of the Chowan River, NC USA.
- Kaneshiro-Pineiro MY, Van Holt T, **Kimmel DG.** 2016. Identifying mismatches among expert and public perceptions of ecology and human-jellyfish interactions for tailored management. Human Organisation.

## D. Contracts and Grants

### 1. Awarded

- \$156,581. NCPC Tract Water Quality Monitoring. CZR Incorporated. 01/01/2015-12/31/2015 (Renewed annually). PI: **Kimmel DG**.
- \$74,575. PCS Phosphate Effluent Monitoring and Water Quality in the Pamlico River Estuary. PCS Phosphate Corporation. 01/01/2015-12/31/2015 (Renewed annually). PI: **Kimmel DG**.
- \$297,699 (Year 1: \$81,371). Linking water quality, food quality, and larval fish condition to determine strategic habitat area quality. 07/01/2015-06/30/2019. NC Department of Environment and Natural Resources. PI: **Kimmel DG**
- \$6,800. Colored Dissolved Organic Matter (CDOM) as a control of primary and secondary production in the Neuse River Estuary: A New Paradigm. 07/01/2014-06/30/2015. ECU Division of Research and Graduate Studies. PI: Miller R, **Kimmel DG**
- \$137,750. NCPC Tract Water Quality Monitoring. CZR Incorporated. 01/01/2014-12/31/2014 (Renewed annually). PI: **Kimmel DG**.
- \$73,087. PCS Phosphate Effluent Monitoring and Water Quality in the Pamlico River Estuary. PCS Phosphate Corporation. 01/01/2014-12/31/2014 (Renewed annually). PI: **Kimmel DG**.
- \$4,900. Evaluating land use effects on the stinging sea nettle *Chrysaora quinquecirrha*: are shoreline hardening structures providing habitat for a nuisance species? North Carolina Sea Grant minigrant. PI: **Kimmel DG**.
- \$125,716. NCPC Tract Water Quality Monitoring. CZR Incorporated. 01/01/2013-12/31/2013 (Renewed annually). PI: **Kimmel DG**.
- \$73,087. PCS Phosphate Effluent Monitoring and Water Quality in the Pamlico River Estuary. PCS Phosphate Corporation. 01/01/2013-12/31/2013 (Renewed annually). PI: **Kimmel DG**.
- \$85,191. RAPID collaborative research: historic freshwater input and hypoxia effects on zooplankton populations in the northern Gulf of Mexico. NSF-Biological Oceanography Program. 08/01/2011-07/31/2012. PIs: **Kimmel DG** (lead PI), Roman MR, Pierson JJ.
- \$4,953. Hydrocarbon signatures in coastal NC waters and mesozooplankton tissue. North Carolina Sea Grant minigrant. PIs: **Kimmel DG** (lead PI), Mitra S
- \$29,745. Analyzing 70 years of oyster monitoring data to help guide oyster restoration in Maryland. Maryland Sea Grant. 02/01/2011-01/31/2012. PIs. Newell RIE (lead PI), **Kimmel DG**, Tarnowski M.
- \$44,284. RAPID Collaborative Research: Spatially-explicit, high-resolution mapping and modeling of quantify hypoxia and oil effects on the living resources of the northern Gulf of Mexico. NSF-Biological Oceanography Program. 08/01/2010-07/31/2011. PIs. **Kimmel DG** (lead PI), Roman MR, Pierson JJ, Brandt SB.
- \$134,849. Collaborative Research: The estuarine chlorophyll maximum as an ecosystem integrator and indicator of contemporaneous nutrient and climatic perturbations. NSF-Division of Environmental Biology. 04/01/2010-03/31/2012. PIs: Paerl HW (lead PI), **Kimmel DG**, Wetz M.

- \$43,996. Collaborative Research: Life histories of species in the genus *Calanus* in the North Atlantic and North Pacific Oceans and response to climate forcing. NSF-Biological Oceanography Program. 08/01/2008-07/31/2011. PIs: **Kimmel DG**, Pierson JJ (lead PI)
- \$527,428. Dynamic stability and particle transformations: tracing pathways of production in Estuarine Turbidity Maxima. NSF Biological Oceanography Program. 10/01/05-9/30/09. PIs: Houde E (lead PI), Crump B, North E, Roman M, Sanford L, Chao S-Y, Hood R, Murray L and **Kimmel DG**.
- \$1,462,729. NGOMEX 2006 – Spatially-explicit, High-resolution Mapping and Modeling to Quantify Hypoxia Effects on the Living Resources of the Northern Gulf of Mexico. NOAA Coastal Ocean Program. PIs: Brandt S (lead PI), Ludsin S, Mason D, Roman M, Boicourt W, **Kimmel DG**, Jochem F, Lavrentyev P.

## **E. Seminars, presentations, posters, websites**

### **1. Invited seminars and papers**

- 2012 Time series analysis workshop. Office for Faculty Excellence, East Carolina University.
- 2012 Keynote Speaker: Great Decisions Lecture Series, East Carolina University
- 2011 University of North Carolina, Institute for Marine Sciences
- 2011 Keynote Speaker: American Democracy Project, California University of Pennsylvania
- 2010 Keynote Speaker: Atlantic Estuarine Research Society Fall meeting
- 2010 Duke University Marine Laboratory
- 2009 University of North Carolina, Institute for Marine Sciences
- 2008 St. Mary's College, Maryland
- 2007 University of Lille, France
- 2006 Keynote Speaker, Transitional Waters Reference Network, Lecce, Italy
- 2006 Wallops Island Marine Science Consortium
- 2006 North Carolina State University, Center for Marine Sciences and Technology
- 2006 Pennsylvania State University
- 2006 IAN Chesapeake Bay Seminar Series
- 2004 University of Maryland Baltimore County
- 2003 Smithsonian Environmental Research Center
- 2003 Chesapeake Biological Laboratory
- 2003 Sarbanes Cooperative Oxford Laboratory

### **2. Contributed papers and posters**

- Kimmel DG**, Ludwig-Monty S. 2015. A moving target: the search for phenology changes in the Tar-Pamlico estuary amidst rapid anthropogenic change. Coastal and Estuarine Research Federation biennial meeting, Portland, OR.
- Kimmel DG**, Tarnowski M, Newell, RIE. 2015. Regional scale weather variability influences eastern oyster (*Crassostrea virginica*) larval settlement in Chesapeake Bay. ASLO Aquatic Sciences Meeting. Granada, Spain.

- Lichti, D, **Kimmel DG**. 2015. Changes in the zooplankton community fatty acid profiles at the freshwater/saltwater interface: implications for larval fish growth and survival. ASLO Aquatic Sciences Meeting. Granada, Spain.
- Sassano, N, **Kimmel DG**. 2014. Evaluating land-use effects on the stinging sea nettle *Chrysaora quinquecirrha*: are shoreline hardening structures creating habitat for nuisance species? 24<sup>th</sup> Biennial Meeting of the Coastal Society and 7<sup>th</sup> National Summit on Coastal and Estuarine Restoration. Washington, DC.
- Zhang H, Mason DM, Stow CA, Adamack AT, Brandt S, Zhang X, **Kimmel D**, Roman M, Boicourt W, Ludsins S. 2013. Impact of hypoxia on habitat quality of pelagic fishes in the northern Gulf of Mexico. Coastal and Estuarine Research Federation biennial meeting, San Diego, CA.
- Wetz M, Cirz E, **Kimmel D**, Paerl H. 2013. Relative influence of top down and bottom up controls upon estuarine phytoplankton growth and community composition. Coastal and Estuarine Research Federation biennial meeting, San Diego, CA.
- McGlaughon BD, **Kimmel DG**, Wetz M, Cirz E, Paerl H. 2013. Spatial and temporal variability of the mesozooplankton community in relation to the chlorophyll maximum of the Neuse River estuary, North Carolina USA. Coastal and Estuarine Research Federation biennial meeting, San Diego, CA.
- Lichti DA, Rinchard J, **Kimmel DG**. 2013. You are what you eat: determining the fatty acid composition in western Albemarle Sound and Chowan River, North Carolina. Coastal and Estuarine Research Federation biennial meeting, San Diego, CA.
- Cirz E, Wetz M, **Kimmel D**, Paerl H. 2013. Bottom-up and top-down controls upon estuarine phytoplankton growth and community composition. ASLO Ocean Sciences Meeting, February 2013, New Orleans, LA.
- Cathey AM\*, Miller N, **Kimmel DG**. 2012. Trace and minor chemistry of juvenile *Mercenaria mercenaria* shell: spatiotemporal patterns and implications for modeling larval dispersal. Coastal and Estuarine Research Federation: 2012 Argentina. Fall 2012, Mar Del Plata, Argentina.
- Cathey AM\*, Miller N, **Kimmel DG**. 2012. The elemental chemistry of natural waters within a well-mixed estuarine system during periods of hard clam *Mercenaria mercenaria* larval dispersal. Southeastern Estuarine Research Society Meeting, Spring 2012, Beaufort, NC
- \**Won best student oral presentation*
- Snyder J, **Kimmel DG**, Mitra S. 2012. Presence of polycyclic aromatic hydrocarbons in mesozooplankton collected from the northern Gulf of Mexico succeeding the *Deepwater Horizon* oil spill. National Conference on Undergraduate Research. Weber State University, Ogden, UT.
- Cathey AM, **Kimmel DG**. 2011. The elemental chemistry of natural waters within a well-mixed estuarine system during periods of hard clam *Mercenaria mercenaria* larval dispersal. Coastal and Estuarine Research Federation biennial meeting, Daytona, FL.
- Kimmel DG**, Mitra S, Snyder J\*, Scalise K, McGlaughon BD, Roman MR, Jahn GL, Pierson JJ, Brandt SB, Montoya J, Rosenbauer RJ, Lorenson TD, Wong FL, Campbell PL. 2011. Macondo-1 well oil-derived polycyclic aromatic hydrocarbons in mesozooplankton from the northern Gulf of Mexico. Coastal and Estuarine Research Federation biennial meeting, Daytona, FL.



- Pierson JJ, Runge J, Head E, Plourde S, Johnson C, Leising A, **Kimmel DG**, Pershing AJ. 2011. Predicting copepod dormancy timing in response to climate change. Ecosystem Studies of Sub-Arctic Seas Open Science Meeting. Seattle, Washington.
- Kimmel DG**, Plourde S, Leising A, Pierson JJ, Runge J, Maps F. 2011. Regional scale climatological forcing of *Calanus finmarchicus* dynamics in the Gulf of Maine and the Gulf of St. Lawrence. Fifth International Zooplankton Production Symposium. Pucón, Chile.
- Runge JA, Maps F, Leising A, Pershing AJ, Pierson JJ, **Kimmel DG**. 2011. Scenarios of climate change impacts on local production of the sub-arctic copepod, *Calanus finmarchicus*, in the Gulf of Maine. Fifth International Zooplankton Production Symposium. Pucón, Chile.
- Kimmel DG**, Roman MR. 2010. Long-term changes in *Acartia tonsa* in the upper Chesapeake Bay: an indirect consequence of eutrophication. Climate change impacts on estuarine and coastal ecosystems: a zooplankton perspective. Boulogne, France
- Devreker D, Roman MR, Pierson JJ, **Kimmel DG**, Souissi S. 2009. Population dynamics of the copepod *Eurytemora affinis* in two trans-Atlantic estuaries: the Chesapeake Bay (USA) and the Seine estuary (France). Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Kimmel DG**, Roman MR. 2009 Long-term changes in *Acartia tonsa* in the upper Chesapeake Bay: an indirect consequence of eutrophication. Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Ludt W, Pierson JJ, **Kimmel DG**, Roman MR. 2009. Determining egg development rates of *Acartia tonsa* in the Chesapeake Bay using a DAPI staining technique and its significance. Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Pierson JJ, Roman MR, **Kimmel DG**, Hood RR, Crump BC, Keller D, Lee D, Malpezzi M. 2009. Estimates of winter zooplankton production in the Chesapeake Bay estuarine turbidity maximum. Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Kimmel DG**, Boicourt WC, Pierson JJ, Roman MR, Zhang X. 2009. Spatial patterns in hypoxia and mesozooplankton in the northern Gulf of Mexico. Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Kimmel DG**, Boicourt WC, Pierson JJ, Roman MR, Zhang X. 2009. A comparison of the mesozooplankton response to hypoxia in Chesapeake Bay and the northern Gulf of Mexico using the biomass size spectrum. ASLO Aquatic Sciences Meeting, Nice, France.
- Pierson JJ, Roman MR, **Kimmel DG**, Zhang X, Boicourt WC, Loveland B. Quantitative relationships between zooplankton vertical distribution and oxycline depth: comparisons between regions, size classes, and time of day. Ocean Sciences Meeting 2008. Orlando, FL.
- Roman M, **Kimmel D**, Pierson J, Boicourt WC, Loveland B, Zhang X. Spatial patterns in hypoxia and zooplankton in the Gulf of Mexico. Ocean Sciences Meeting 2008. Orlando, FL.
- Pierson J, Roman M, **Kimmel D**, Hood R, Crump B, Keller D, Malpezzi M. 2007. Winter zooplankton abundance, distribution, and vital rates in the Chesapeake

- Bay estuarine turbidity maximum. Estuarine Research Federation. Providence, RI.
- North E, Houde E, Chao S, Crump B, Friedrichs C, Hood R, **Kimmel D**, Martino E, Roman M, Pierson J, Sanford L. 2007. A synthesis of biological-physical interactions in the Chesapeake Bay estuarine turbidity maximum. Estuarine Research Federation. Providence, RI.
- Kimmel DG** and Newell RIE. 2007. The influence of climate variation on eastern oyster (*Crassostrea virginica*) juvenile abundance in Chesapeake Bay. Estuarine Research Federation. Providence, RI.
- Ludsin SA, Brandt SB, Mason DM, Roman MR, **Kimmel DG**, Boicourt WC, Zhang X, Rae CM. 2007. Effects of hypoxia on the distribution and behavior of fish in the northern Gulf of Mexico. Water Rocks! ASLO Aquatic Sciences Meeting, Santa Fe, NM.
- Roman M, **Kimmel D**, Pierson J, Hozyash K, Boicourt W, Zhang X. 2007. Spatial and temporal variability of zooplankton in the northern Gulf of Mexico: effects of low oxygen bottom waters. Water Rocks! ASLO Aquatic Sciences Meeting, Santa Fe, NM.
- Kimmel DG**, Roman MR, Boicourt WC, Hozyash K, Zhang X. 2007. Zooplankton response to hypoxia in Chesapeake Bay and the northern Gulf of Mexico: evidence from biomass size spectra. Water Rocks! ASLO Aquatic Sciences Meeting, Santa Fe, NM.
- Kimmel DG**, Brooks MT, Roman MR, Taylor JC, Waggener A and Wazniak TM. MEGATRANSECT: 2006. Mapping low dissolved oxygen, zooplankton and fish abundance over a 24 hour period in the Neuse River, USA. 13<sup>th</sup> Ocean Sciences Meeting. Honolulu, HI.
- Zhang X, Wood RJ, Townsend H, **Kimmel DG** and Roman MR. 2006 Interaction between Atlantic menhaden and striped bass in Chesapeake Bay: implication for ecosystem-based fishery management. 13<sup>th</sup> Ocean Sciences Meeting. Honolulu, HI.
- Roman M, Boicourt W, **Kimmel D**, Spear A and Zhang X. Fine-scale distribution of mesozooplankton in relation to hypoxia in Chesapeake Bay and the northern Gulf of Mexico. 2006. 13<sup>th</sup> Ocean Sciences Meeting. Honolulu, HI.
- Ludsin SA, Brandt SB, Vanderploeg HA, Roman MR, Boicourt WC, **Kimmel DG** and Zhang X. 2006. Ecological responses of pelagic zooplankton and fish to seasonal hypoxia in the northern Gulf of Mexico, Chesapeake Bay, and Lake Erie. 13<sup>th</sup> Ocean Sciences Meeting. Honolulu, HI.
- Jung S, **Kimmel DG**, Adolf J, Houde ED, Harding LW and Roman MR. 2005. Biomass size spectra as integrative trophic indicators in Chesapeake Bay. Chesapeake Research Consortium/Estuarine Research Federation. Norfolk, VA.
- Kimmel DG** and Roman MR. 2005. Long-term changes in zooplankton abundance in the upper Chesapeake Bay. Chesapeake Bay Colloquium. Chesapeake Research Consortium/Estuarine Research Federation. Norfolk, VA.
- Kimmel DG**, Miller WD, Wood RJ, Harding LW and Roman MR. 2005. Regional scale climate forcing of Chesapeake Bay trophic dynamics. Estuarine Interactions: Biological-Physical Feedbacks and Adaptations. Estuarine Research Federation. Norfolk, VA.

- Miller WD, Harding LW and **Kimmel DG**. 2005. Predicting the spring discharge of the Susquehanna River from a synoptic climatology for the eastern United States. Estuarine Interactions: Biological-Physical Feedbacks and Adaptations. Estuarine Research Federation. Norfolk, VA.
- Roman M, Boicourt W, **Kimmel D** and Zhang X. 2005. Seasonal and annual variability in the spatial patterns of zooplankton biomass in Chesapeake Bay. Chesapeake Bay Colloquium. Chesapeake Research Consortium/Estuarine Research Federation. Norfolk, VA.
- Kimmel DG**, Zhang X and Roman MR. 2005. Spatial and temporal variability in factors affecting mesozooplankton dynamics in Chesapeake Bay: evidence from biomass size spectra. A Pilgrimage Through Global Aquatic Sciences. ASLO Summer Meeting. Santiago de Compostela, Spain.
- Kimmel DG**, Zhang X, Roman MR, Boicourt WC and others. 2004. Spatial and temporal variability of mesozooplankton biomass size spectra in Chesapeake Bay as measured by an optical plankton counter. Ocean Research Conference. ASLO/TOS. Honolulu, HI.
- Kimmel T, Driscoll C, Matsche M, Pieper L and **Kimmel D**. 2004. Population and health assessment of sea turtles in Maryland waters of the Chesapeake Bay. 24<sup>th</sup> Annual Symposium on Sea Turtle Conservation and Biology. San Jose, Costa Rica.
- Kimmel DG** and Roman MR. 2003. Weather patterns influence mesozooplankton dynamics in the Chesapeake Bay: implications for climate change. Estuaries on the Edge: Estuarine Research Federation. Seattle, WA.
- Kimmel DG** and Roman MR. 2003. Weather patterns as indicators of mesozooplankton dynamics in the Chesapeake Bay. The Earth's Eyes: Aquatic Sciences Through Space and Time: American Society of Limnology and Oceanography. Salt Lake City, UT.
- Kimmel DG** and Roman MR. 2002. Influence of water quality parameters on zooplankton abundance and community composition in the northern Chesapeake Bay: implications for climate change. Interdisciplinary Linkages in Aquatic Sciences and Beyond. American Society of Limnology and Oceanography. Victoria, British Columbia, Canada.
- Bradley BP, Shrader EA, Meiller JC, Pavlick CD, Ruth LM and **Kimmel DG**. 2001. Protein expression signatures: a method of proteomics. Pollution Responses in Marine Organisms XI. Plymouth, UK.
- Bradley B, Shrader E, Meiller J and **Kimmel D**. 2001. Proteomics: opportunities in environmental toxicology. Society for Environmental Toxicology and Chemistry, 22<sup>nd</sup> Annual Meeting. Baltimore, MD.
- Kuperman R, Checkai R, Bradley B, Ruth LM, **Kimmel DG**, Simini M and Phillips C. 2001. Development of a proteome-based system for detecting exposure of soil biota to xenobiotics. Society for Environmental Toxicology and Chemistry, 22<sup>nd</sup> Annual Meeting. Baltimore, MD.
- Kimmel DG** and Bradley BP. 2000. Defining the ecological limits of *Eurytemora affinis* using proteome analysis. Research Across Boundaries. American Society of Limnology and Oceanography. Copenhagen, Denmark.

## F. Society Membership

American Geophysical Union  
 American Society for Limnology and Oceanography  
 Coastal and Estuarine Research Federation  
 Phi Kappa Phi Honor Society  
 Sigma Xi

## V. Teaching and Training

### A. Courses

Course No.	No. Lectures	Title	Institution	Semester	Enrollment	Credit Hours	Co-Instructors
BIOL 6882	28	Science Communication	ECU	Fall 2015	10	3	NA
BIOL 4250	28	Biological Oceanography	ECU	Spring 2012-16	30	3	NA
RCLS 4123	Study Abroad	Study Abroad in International Sustainability Australia: Humans and the Environment	ECU	Summer I 2013-2015	10-20	6	Vogelsong (ECU)
BIOL 4800	28	Biological Oceanography	ECU	Spring 2012-2013	30	3	NA
BIOL 6850	14	Advances in Ecology	ECU	Spring 2010-2011, Fall 2014	5-10	1	NA
BIOL 6910	14	Coastal Ecological Processes	ECU	Fall 2009-2013	10-15	4	NA
BIOL 2250	28	Ecology	ECU	Spring 2009-2010	150	3	Clough (2009)
MEES 698E	14	Zooplankton Ecology	UM/MEES	Fall 2007	9	3	Stoecker, Roman
MEES 608F	14	Bio-physical coupling in upper estuaries	UM/MEES	Fall 2006	7	1	Crump, Hood, Houde, North, Roman, Sanford
MEES 608G	14	Survey of Applied Statistics for Ecologists	UM/MEES	Fall 2005	11	1	Townsend (NOAA)

### B. Advising

#### 1. Graduate students currently supervised

Student	Degree Sought	University	Anticipated Graduation
Debbie Lichti	PhD	ECU	2018

#### 2. Past graduate students supervised

Student	Degree	University	Graduation Date
Nina Sassano	MS	ECU	August 2015

Deborah Lichti	MS	ECU	May 2014
Andrew Cathey	PhD	ECU	December 2013
Mahealani Kaneshiro-Pineiro	PhD	ECU	May 2013
Benjamin D. McGlaughon	MS	ECU	May 2012

### 3. Current graduate student committee memberships

Student	Degree Sought	Advisor	University
Bunnell, Anne	PhD	Avenarius, Edwards	TAMU-CC
Albecker, Molly	PhD	Michael McCoy	ECU
Buonassisi, Chris	PhD	Richard Miller	ECU
Zenil, Hilde	PhD	Joseph Luczkovich	ECU
Werba, Jo	MS	Michael McCoy	ECU
Geohrig, Tori	MS	Marcelo Ardon	ECU
Speights, Cori	MS	Michael McCoy	ECU
Tolopka, Nicholas	MS	Anthony Overton	ECU
McCulloch, Tracy	MS	Anthony Overton	ECU

### 4. Past graduate student committee memberships

Student	Degree Earned	Year	Advisor	University
McCarthy, Lauren	PhD	2015	David Chalcraft	ECU
Smith, Chad	PhD	2015	Roger Rulifson	ECU
Hughes, Coley	PhD	2015	Roger Rulifson	ECU
Kain, Morgan	MS	2015	Michael McCoy	ECU
Elking, Brie	MS	2014	Roger Rulifson	ECU
Dell'apa, Andrea	PhD	2013	Roger Rulifson	ECU
Meyer, Kevin	PhD	2013	Judith O'Neill	UMCES-HPL
Paterson, Shona	PhD	2013	David Loomis	ECU
Leverett, Lindsay	MS	2011	Claudia Jolls	ECU
Sexton, Margaret	PhD	2011	Raleigh Hood	UMCES-HPL
Mabe, Wayne	MS	2011	Anthony Overton	ECU
Binion, Samantha	MS	2010	Anthony Overton	ECU
Vlahovich, Emily	MS	2009	Donald Meritt	UMCES-HPL
Jahn, Ginger	MS	2009	Elizabeth North	UMCES-HPL
Grant, Melissa	MS	2009	Donald Meritt	UMCES-HPL
Edwards, Jason	MS	2009	Thomas Miller	UMCES-CBL
Devreker, David	PhD	2007	Sami Souissi	l'Université du Havre, France

### 5. Undergraduate students advised

Student	Degree Earned	Year	Advisor	University
Thaxton, Christopher		2016	Kimmel	ECU
Valmassoi, Andrew		2016	Kimmel	ECU
Brantley, William	BS	2015	Kimmel	ECU
Burch, Amber	BS	2015	Kimmel	ECU
DiVittorio, Madeline	BS	2015	Kimmel	ECU
Bryan, Kelsey	BS	2014	Kimmel	ECU
Shore, Amy	BS	2013	Kimmel	ECU
McLaughlin, Barryn	BS	2013	Kimmel	ECU
Howe, Jarrod	BS	2013	Kimmel	ECU
Cornelson, Amanda	BS	2012	Kimmel	ECU
Lell, Meghan	BS	2010-2011	Kimmel	ECU
Snyder, Jessica	BS	2010-2011	Kimmel	ECU
Nelson, Benjamin	BS	2010	Kimmel	ECU

Bell, Caitlin  
Ludt, William

BS  
BS

2009  
2008

Kimmel/Mitra  
Kimmel/Pierson

ECU  
Research Experience for Undergraduates  
from University of Arizona

## VI. Outreach and Service

### A. Journal Service

2015-Present: Associate Editor, *Estuaries and Coasts*

Reviewer of manuscripts for *CalCOFI Reports*, *Canadian Journal of Fisheries and Aquatic Sciences*, *Ecological Research*, *Environmental Toxicology*, *Estuaries and Coasts*, *Estuarine Coastal and Shelf Science*, *Fisheries Oceanography*, *Helgoland Marine Research*, *Hydrobiologia*, *Journal of Experimental Marine Biology and Ecology*, *Journal Geophysical Research Oceans*, *Journal of Plankton Research*, *Limnology and Oceanography*, *Limnology and Oceanography Methods*, *Marine Biology*, *Marine Biology Research*, *Marine Ecology Progress Series*, *Marine Environmental Research*, *PLoS-ONE*, *Polar Biology*

### B. Public Service

2015 North Carolina Division of Water Resources – Scientific Advisory Council on Nutrients

2013-2015 City of Greenville Stormwater Stakeholders Group

2013-2015 City of Greenville Environmental Advisory Commission

2013 Invited Seminar: “State of the Oceans.” Cypress Group of the Sierra Club, Greenville, NC

2012 Interview quote in the 13 April 2012 *Wall Street Journal*, Page A3

2012 Radio interview for Summit Daily News about *Deepwater Horizon* spill

2012 Radio interview for Voice of Russia Radio about *Deepwater Horizon* spill

2012 Radio interview for International Business Times about *Deepwater Horizon* spill

2012 Television (WITN, Greenville NC) interview about *Deepwater Horizon* spill

2012 Radio interview for Public Radio East, Down East Journal about *Deepwater Horizon* spill

2011 Pitt County Teen Leadership Institute

2010-Present Albemarle-Pamlico National Estuary Program Scientific and Technical Committee member

2011 Science Judge for the Blue Heron Bowl competition

2010 Interview on “Henry Hinton Show” about *Deepwater Horizon* spill

2010 Television (WNCT, Greenville NC) interview about *Deepwater Horizon* spill

2010 GoScience Café Event, panelist for a forum on the *Deepwater Horizon* spill

2007 Advisor for Kevin Hoover, a Gifted and Talented student at Reservoir High School, Howard County, Maryland

2007 Speaker Bureau: Mid-Atlantic Regional Air Monitoring Association annual meeting, Ocean City, Maryland

2007 Speaker Bureau: St. Michaels Breakfast Club

### C. East Carolina University Service

2015-2016 Research Vessel Use and Safety Commission (University Wide Committee)  
2015-2016 Department of Biology Personnel Committee (Chair)  
2014-2015 Thomas Harriot College of Arts and Sciences Fiscal Sustainability Working Group  
2014-2015 ECU-UNCW Joint PhD Program in Marine Science Committee  
2014 Coastal Resources Management Director Search Committee (Chair)  
2014-2015 Department of Biology Personnel Committee (Co-chair)  
2014 Conservation Biologist Assistant Professor Search Committee  
2013-2015 Department of Biology Vehicle Use Committee  
2103-2015 Coastal Maritime Council  
2012-2014 Department of Biology Executive Committee  
2012 Microbial Ecologist Assistant/Associate Professor search committee  
2011-2013 Boating Control Safety Commission (University Wide Committee)  
2011 Macroecologist Assistant Professor search committee  
2010-2011 University Library Committee (University Wide Committee)  
2010-2011 Department of Biology Executive Committee  
2010 Wetland Ecologist Assistant Professor search committee  
2009-2011 Department of Biology Graduate Committee  
2009-2014 Coastal Resource Management Graduate Applications Review Committee  
2009 Coastal Ocean Dynamics Assistant Professor search committee

#### **D. UMCES and Horn Point Laboratory Service**

2008 MEES Oceanography AOS Admissions  
2007 Education Committee  
2007 Open House Committee  
2007 Seminar co-chair (with Victoria Coles)

#### **E. Local/National/International Professional Service**

2013 Session co-chair, Coastal and Estuarine Research Federation biennial meeting, San Diego, California  
2013 National Science Foundation panelist  
2011 Reviewer for Delaware Sea Grant  
2011 Session co-chair, Coastal and Estuarine Research Federation biennial meeting, Daytona, Florida  
2010-2012 Research Council of Norway, Panelist for the Council's annual grant competition.  
2010 Reviewer for New York Sea Grant  
2010 National Science Foundation panelist  
2010 Scientific Committee for Workshop: Climate change impacts on estuarine and coastal ecosystems: a zooplankton perspective. Boulogne, France  
2009 Session co-chair, Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon  
2008-2016 Reviewer National Science Foundation

- 2008-Present North Carolina Marine Fisheries Commission Blue Crab Advisory Committee
- 2008 Reviewer for Oregon Sea Grant
- 2008-2009 GLOBEC 3<sup>rd</sup> Pan-Regional Synthesis Meeting, Boulder, Colorado
- 2007-2008 State of Maryland Commission on Climate Change, Scientific and Technical Advisory Working Group
- 2007 Ecological Impacts of Hypoxia on Living Resources Workshop, NOAA, Bay St. Louis, MS, 26-29
- 2007 Session co-chair, ASLO Aquatic Sciences Meeting, Santa Fe, New Mexico
- 2006-Present Reviewer for National Science Foundation Biological Oceanography Program
- 2006 Gulf of Mexico Hypoxia: Assessing the State of the Science Symposium. NOAA, New Orleans, LA, 25-27
- 2006 EPA Oceanography and Coastal Processes (06-E7 & 06-E2, panel A) panel. Washington, DC. 13-14
- 2005 Zooplankton/Food-Web Monitoring for Adaptive Multi-species Management Workshop, Chesapeake Research Consortium, 12-13
- 2005 Participating Scientist in Center for Ocean Sciences Education Excellence (COSEE)
- 2002 Suspension Feeder Workshop: a workshop to assess what we know, don't know and need to know to determine their effects on water quality, Chesapeake Bay Program, 18-19